

Medical Officer's Report

ON THE

HEALTH AND SANITARY CONDITION


OF THE

Urban Sanitary District of Dukinfield

FOR THE YEAR, 1899.

DUKINFIELD :

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REPORT.

KING STREET, DUKINFIELD,

FEBRUARY 27TH, 1900.

To the Chairman and Gentlemen of the Sanitary Committee.

GENTLEMEN,

I beg to submit to you my eighth Annual Report on the health and sanitary condition of the Borough ; a report which covers a period from January 1st to December 31st, both inclusive.

The calculations are based on a population for the whole borough of 20,000, but from returns furnished in July, 1899, the population was estimated to be 20,294, or an increase of 310 on the previous year.

The population of the borough was, according to Census :—

	1871.	1881.	1891.
Males	6,644	7,947	
Females ..	7,441	8,996	
	<hr/> 14,085	<hr/> 16,943	<hr/> 17,408

The number of houses in 1891 was :—

Inhabited.....	3,769
Empty.....	530
	<hr/> 4,299

In July, 1899, the number of houses was :—

WEST DUKINFIELD.

Inhabited.....	1,988
Empty.....	41
	<hr/>
	2,029

EAST DUKINFIELD.

Inhabited.....	2,330
Empty.....	68
	<hr/>
	2,398

WEST AND EAST DUKINFIELD.

Inhabited.....	4,318
Empty.....	109
	<hr/>
	4,427

This makes an average, taking the population at 20,294, of 4·6 persons per house. The rate of increase of population was :—

From 1891 to 1896.....	2·7 per cent.
From 1896 to 1897.....	0·5 per cent.
From 1897 to 1898.....	0·7 per cent.
From 1898 to 1899.....	1·6 per cent.

The population of West Dukinfield is estimated at 9,500, and East Dukinfield at 10,500.

During the year, Dukinfield, on receiving a Charter of Incorporation, was divided into three wards, East, West, and Central, but as this division did not take effect until November, I have adhered to the old divisions for the year 1899.

The Urban Sanitary District contains an area of 1,263 acres, and shows a mean density of 16·07 per acre.

The smoke nuisances, which were complained of chiefly in Dukinfield Hall are practically abated, the owners having assisted the Sanitary Authority to put matters right.

We are joint owners with the Corporations of Ashton-under-Lyne, Stalybridge, and Mossley, of the District Waterworks. This water is gathered from the springs and streams in the Swineshaw Valley and is pure in quality, and the average net daily supply is 17·04 gallons per head. This, I understand, will soon be increased, as the Waterworks Committee are actively engaged in building a new reservoir.

One or two cases of lead poisoning were reported during the year, and in one case more than one tenth of a grain per gallon was found in the water. The water is very soft, and coming as some of it does from a peaty district, is perhaps liable to some extent to dissolve lead out of old fashioned pipes which are not tin lined.

A Committee was formed to inquire into this question and samples of water were taken from different parts of the town, with the result that we may confidently say that as a town our drinking water is practically free from lead in anything like serious proportions.

I have to thank your Surveyor, Mr. Sam Hague, for the following table which gives some valuable information as regards our water supply.

The following table shows the consumption of previous years :—

YEAR.	Gross supply from Sw'shaw Gallons.	Used for Trades Purposes. Gallons.	Net supply. Gallons.	Daily use per head.		Popul'n
				Gross Gallons	Net Gallons	
1891	134,700,000	12,265,000	122,435,000	21.21	19.28	17,400
1892	122,900,000	17,390,000	105,510,000	19.13	16.42	17,600
1893	123,400,000	15,137,000	108,263,000	19.00	16.66	17,800
1894	145,500,000	16,540,000	128,960,000	22.10	19.61	18,000
1895	135,500,000	15,212,310	120,287,690	19.85	17.62	18,700
1896	122,000,000	15,413,700	106,586,300	17.59	15.37	19,000
1897	124,000,000	18,400,000	102,000,000	16.74	14.18	19,700
1898	142,200,000	18,434,400	123,765,000	19.48	16.95	20,000
1899	141,100,000	16,670,000	124,430,000	19.32	17.04	20,000
Average..	132,366,666	16,162,490	115,804,110	19.38	17.01	18,690

The following table shows the quantity of water supplied from the lower reservoirs :—

Works supplied.	1894	1895	1896	1897	1898	1899
Dukinfield Bleaching Co. (Late T. Hoyle & Son) ..	2,635,000	4,113,000	5,119,000	1,694,000	4,220,000	19,000
Astley Mill Co. Ltd.....	5,290,000	7,840,000	5,754,000	3,813,000	4,707,000	5,169,000
W. Underwood & Bro....	86 700	32,300	..	..	..	..
Thos. Beeley.....	..	325,000	1,375,000	3,813,000	2,142,000	2,352,000
J. T Holderness .....	..	..	..	133,000	2,035,000	2,225,000
Newton Moor Spg. Co. ..	..	..	..	..	..	600,000
D. Adamson & Co. ....	..	..	..	..	1,855,000	2,005,000
Total.....	8,011,700	12,310,300	12,248,000	9,453,000	14,959,000	12,370,000

The rainfall for the year 1899 was 24·71 inches, as indicated by the rain-fall gauge.

GENERAL REPORT ON THE WATER SUPPLY FOR THE YEAR 1899.

GENTLEMEN,

In submitting my Report for the year 1899, I beg to say the total quantity of water supplied to Dukinfield from Swineshaw, as registered by the Meters in Stalybridge, has been for the past 52 weeks ending December 29th, 1899, 141,100,000 gallons, or an average weekly consumption of 2,713,461 gallons; of this quantity, 16,670,000 gallons have been supplied by meter for trades purposes, leaving 124,430,000 gallons for private consumption, watering the streets, fires, fire-brigade practices, loss by evaporation and leakages, &c. This quantity, for a population of 20,000 inhabitants, shows a consumption of 17·04 gallons per head daily, or on the gross quantity registered of 19·32 gallons per head daily,

Yours truly,

SAM. HAGUE.

The chief industries of the district are: Cotton Manufacture, including Spinning and Weaving, Engineering, Spindle Manufacture, Boiler Works, Electric Works, Soap Works, Dye Works, Rope Manufactures, and three Coal Pits employing nearly 1,000 men and boys. There are no offensive trades carried on in the borough.

At present, there are in the district, three systems of closets:— (1) ash-pits, (2) pails, (3) flush closets, including water closets. The first two will be entirely done away with when the sewage works are completed, in fact many landlords are converting them into flush closets in whole rows of property. In all new property the third system is absolutely compulsory. The Inspector makes monthly inspections of the flush closets, and out of a total of 486 he found 6 defective.

Most of the excreta from the pails is taken to the sewage farm.

The nightsoil from the ashpits is tipped on the sewage farm in the night-time.

The closets are at present flushed into the sewers and then into the river.

The sewage works at Bradley Hurst are rapidly reaching completion, and very shortly all the sewage will be carried there by means of two main sewers, the high level, and low level sewers, where it will be treated on some system of precipitation and filtration.

We are joint owners with Stalybridge of these sewage works. The tip is an excellent one of its kind; but the Committee have under consideration the question of a destructor for destroying all refuse.

The deputation which visited the Congress of the Royal Institute of Public Health during this year reported favourably of these destructors, but more particularly of Meldrum's Duplex Destructor as working at Darwen Electric Supply Station. "It claims to be capable of burning 50 tons of ashpit refuse per day, and of developing over 200 tons brake-horse power per hour. This destructor is not only used for destroying the town's refuse, but the heat and power generated are of service in producing the electric light at Darwen."

The district has been regularly and systematically scavenged. The street sweepings are conveyed to Bradley Hurst, and all refuse from the ashpits is conveyed to the tip at the farm.

The sewerage of the district is very efficiently and extensively carried on, with Bradley Hurst as the outlet. The sewers are ventilated at the man-holes.

House drainage is also carefully attended to, and the Inspector insists, by periodical inspections, that all drains are properly trapped and the slopstone pipes cut off.

The sewers are regularly flushed, especially in dry weather and where there is not much fall, but owing to the contour of the district, there is, speaking generally, not much necessity for frequent flushing.

The Cemetery, which is joint with Ashton-under-Lyne, is in an excellent sanitary condition, and is large enough for present requirements and for some time to come.

In September last, the Park, an open space consisting of ten acres, very centrally and favourably situated, had the first sod cut and the first tree planted, and will before long be properly laid out and completed, to the benefit of the inhabitants.

The Infectious Diseases (Notification) Act, 1889, was adopted in November, 1892.

During the year, 161 cases of Infectious Diseases have been notified, compared with 139 in 1898, 142 in 1897, 176 in 1896, and 139 in 1895.

There were 27 cases in the first quarter, 30 in the second, 26 in the third, and 78 in the fourth quarter.

NOTIFICATION OF INFECTIOUS DISEASES IN MONTHS.

MONTH.	Scarlet.	Typhoid.	Diphtheria.	Croup.	Erysipelas	Puerperal Fever.	Total.
January.....	2	7	1	1	0	0	11
February	4	0	0	0	0	0	4
March	8	1	2	1	0	0	12
April	1	1	1	0	0	0	3
May	14	0	0	0	1	0	15
June	8	0	2	0	2	0	12
July	11	0	0	0	0	0	11
August	1	3	3	0	0	0	7
September....	5	0	2	0	0	1	8
October	20	21	0	0	2	0	43
November	10	12	0	0	0	0	22
December	7	4	0	0	2	0	13
Total.....	91	49	11	2	7	1	161

Scarlet Fever accounted for 91 notifications, compared with 85 in 1898, 96 in 1897, and 139 in 1896.

Scarlet Fever is undoubtedly endemic in this district, it has come to stay, but isolation, disinfection, and cleanliness, can do much to lessen the number of attacks, particularly in the same house. In some houses isolation is impossible and in several cases parents have expressed a desire to send an infected child to the Infectious Hospital, a request which the Sanitary Authority has always complied with when a bed has been available.

There were 49 cases of Typhoid notified during the year, compared with 37 in 1897. The number of Typhoid notifications have been considerably in excess during the last two years. Of these 49 cases, 33 were notified in October and November, and 29 in a very limited area.

Along with the late Chairman, Dr. Clarke, the Surveyor and Sanitary Inspector, this district was carefully inspected by me. Samples of milk and water were analysed without any result, but the drainage was found defective and was put right at once. A number of these cases was due to direct infection, 7, 4, 3, and 2 occurring respectively in one house, and relatives and friends carried the infection from the infected house to their own.

Scarlet Fever Cases and Typhoid have been sent to the Hospital at Hyde, with which Hospital arrangements are made for the use of two beds when required.

There were six deaths from Scarlet Fever, or a rate of 6·6 per cent.

There were 6 deaths from Diphtheria and Croup, or a rate of 46 per cent.

There were 7 deaths from Typhoid, a rate of 14·3 per cent.

When an Infectious Disease is notified as occurring at any house, the Nuisance Inspector is instructed to act as follows:—

- 1.—To call as soon as possible at the house and get information as to—*(a)* Age of patient
(b) Source of infection
(c) Sanitary condition of house and surroundings
(d) Isolation (if any) at home or hospital
(e) Milk supply
(f) School attended.
- 2.—To communicate at once with the master of the school at which any member of the household attends.
- 3.—To communicate also to the Librarian of the Free Library, so that no books may be lent out to the infected house, and if any such books happen to be already in the house, they are to be destroyed or disinfected before they are returned to the Library.
- 4.—At the request of the medical attendant, to fumigate the sick room with the fumes from burning sulphur.

Disinfectants in solution and in powder are provided free by the Sanitary Authority on all occasions. The houses are disinfected, the sick room cleaned thoroughly, and in many cases the walls are whitewashed.

We have several miles of canals in our district but there is no actual building of boats that are registered. The Inspector made 54 visits to the canal during the year and inspected 39 boats.

There are ten Slaughter-houses in actual use. These are inspected periodically and are kept as a rule in a clean and sanitary condition, although in some cases they are short of air, cramped, and in objectionable places.

We have several Bakehouses which are also regularly inspected and reported upon. These are in a good sanitary condition.

There are 22 Dairies and Cowsheds which are inspected from time to time. In the majority of cases there is little or no cause for complaint.

There are a few back to back houses, some of which have been condemned, but no inhabited cellar dwellings.

Samples of food and milk are submitted to the Analyst by the Inspector who is appointed by the County. Several prosecutions and convictions have taken place during the year.

The following statistics as regards vaccination, &c., have been supplied me by the Vaccination Officer, Mr. Brierley :—

DUKINFIELD, 1899.

Return of Births, Successfully Vaccinated, Insusceptible of Vaccination, Postponed, Dead, Unvaccinated,
 Removed from the District, Certificates received of Conscientious Objection to Vaccination, &c., &c.

FROM THE 1ST JANUARY, 1899, TO THE 31ST DECEMBER, 1899.

Dukinfield	No. of Births Registered in 1899	Successfully Vaccinated	Insusceptible of Vaccination	Dead Unvaccinated	Postponed by Medical Certificate	Removed from the District	Certificates of Conscientious objection to Vaccination	Illegitimate Births	No. of Births yet unaccounted for
Dukinfield part of the Stalybridge Sub-District	551	274	2	77	13	8	11	17	166

I hereby Certify that the above is a true Return, the Illegitimate Cases are counted with the Births.

January 4th, 1900.

S. N. P. BRIERLEY,

Registrar.

It is interesting to notice that out of a total of 551 births only 11 certificates of conscientious objection to vaccination were granted. It is many years since anything like the same number of children were vaccinated as have been vaccinated in 1899.

There were 17 illegitimate births or nearly 3 per cent of the total births.

ZYMOTIC DISEASES.—INFLUENZA.

There were nine deaths from Influenza compared with two in 1898, one in 1897, one in 1896, and one in 1895. This disease is of course an infectious fever, but one which it is most difficult to isolate; it seems to be present, more or less in a mild form, at different periods of the year, and occasionally bursts forth more seriously as an epidemic. Great care should be exercised in the early stages in order to prevent complications such as pneumonia, &c.

SMALLPOX.

There have been no cases of Smallpox in Dukinfield for some years.

MEASLES.

Measles seem to come in waves in epidemic form. There were 15 deaths from this disease during the year, compared with 4 in 1898, and 36 in 1897. In 1897 Measles was very prevalent in all parts of Dukinfield except the Newton Wood district, and the schools were closed for four weeks. In 1899 the district most seriously affected was Newton Wood district, and the school there was closed for a similar period. It seems however to be now spreading slowly over a much wider area and I expect there will be more cases in 1900.

WHOOPING COUGH.

Whooping Cough accounts for 1 death only in 1899, compared with 4 in 1898 and 19 in 1897.

SCARLET FEVER.

91 cases of Scarlet Fever were notified with six deaths, compared with nine deaths in 1898, three in 1897, and four in 1896.

Scarlet Fever seems to be endemic in Dukinfield, rarely epidemic and seldom fatal.

TYPHOID FEVER.

49 cases of Typhoid Fever were notified with seven deaths, compared with nine deaths in 1898 and three in 1897. Probably the fact that the supply of water was less during the dry weather may have had something to do with the unusually large number of cases of Typhoid, but many were due to direct infection.

DIPHTHERIA AND CROUP.

13 cases of Diphtheria and Croup were notified with six deaths, a high percentage, compared with three deaths in 1898 and one in 1897.

PHTHISIS.

Pulmonary Phthisis was responsible for 23 deaths, compared with 24 in 1898 and 26 in 1897. Seven other deaths were due to Tuberculosis in other organs than the lungs.

Phthisis is now recognised as an acute Infectious Disease, and much can be done by isolation, cleanliness, and disinfection of sputa to prevent its spread.

DIARRHŒA.

Diarrhœa accounted for 15 deaths, none in the first quarter, none in the second, 13 in the third, and two in the fourth. A number of deaths, however, was certified as Gastritis, Enteritis, and Gastro-intestinal Catarrh, some of which may have been Infectious Diarrhœa.

The death rate from Diarrhœa this year is 0·75, compared with three in 1897.

The total death rate from the seven principal Zymotic Diseases was 2·5, compared with 4·5 in 1898 and 5·45 in 1897.

INFANTILE MORTALITY.

The subject which at the present moment is occupying more than any other the attention of the Sanitary Committee is that of Infant Mortality. The rate of mortality of children under one year compared with 1000 births for the year is 222, in 1898 it was 235, in 1897—227, and in 1896—180.

The Infant Mortality in the various months was :—

January.....	142	July	240
February	232	August	446
March	135	September	511
April	94	October.....	154
May	122	November	214
June	146	December	318

I have made an analysis of these 122 deaths with the following result :—

Preventible Diseases.	Other Diseases.
Diarrhœa 14	Bronchitis..... 9
Measles 3	Pneumonia 11
Scarlet Fever 1	Premature Birth 11
	Accident 1
	Debility 11
	Inanition 7
	Laryngismus Stridulus 1
	Skin Disease..... 1
	Tabes Mesenterica .. 1
	Hydrocephalus..... 1
	Convulsions 8
	Teething 2
	Thrush 1
	Gastritis & Enteritis.. 39
	50
<hr/> Total.....18	<hr/> Total.....104

That is to say 18 deaths only out of 122 may be attributed to Insanitation in some way or other. On the other hand if we total the deaths from Diarrhœa and the 50 deaths bracketed together above, we will find that the large proportion of 64 out of 122 deaths is due to diseases of stomach and bowels and allied complaints. The Committee have recognised that in many of these cases improper feeding is the cause, and have set themselves seriously to counteract it by means of cards with printed instructions on the feeding of infants—which cards can be conveniently hung on the walls of each house. The Medical Officer also gave a lecture on this subject which was fully reported in the local papers. In this lecture he quoted so high an authority as Dr. Ashby, who says that “half the deaths of children under one year are due to improper feeding” and that “for children under six months woman’s milk is better than cow’s milk because the curd is more easily digested.” The Medical Officer of Health for Stockport, a similar town to Dukinfield, which has an even higher infantile mortality than Dukinfield,

after making careful investigations and drawing up statistics for many years back, has come to the conclusion that the high infantile mortality at Stockport is not due to Insanitation but to improper feeding, and has advised the teachers and managers of schools to instruct their children in domestic hygiene and the proper feeding of infants.

During the siege of Paris 1870-1871, although owing to the scarcity of food the general mortality was nearly doubled, the infant mortality was reduced 40 per cent. The reason of this was that the mothers could not afford to give their children any luxuries and as far as possible they were fed on the breast.

The same adult increase and infant decrease in mortality took place in Lancashire during the Cotton Famine, and for exactly the same reason.

Unfortunately in this district the employment in factories of those about to become mothers, and those who have been recently confined, almost necessarily prohibits the children from getting proper breast milk.

It is important therefore that in these cases a suitable substitute for breast milk should be supplied to these children. Acting on this principle the Sanitary Committee have sent a deputation to St. Helens to get information on the feeding of children there on artificial humanised and sterilised milk. A scheme is now being prepared to encourage in some practical way the feeding of infants in Dukinfield on similar lines, and it will be submitted to the Council at an early date.

TABLE I.
BIRTHS.

Number..551	{	Males 289		Rate ....27·4
		Females .. 262		
Natural Increase of Population, 180				

TABLE II.

Number of Births, and Rate—Monthly and Quarterly :—

Month.	No.	Rate.	Quarter.
January (5 weeks)	..4925·5	} Number..... 129 Rate 25·8
February 4	„ ..43	....27·9
March 4	„ ..37	....24·02
April 4	„ ..3220·08	} Number..... 121 Rate 24·2
May 5	„ ..41	....21·3
June 4	„ ..48	....31·2
July 5	„ ..5026·0	} Number..... 133 Rate 26·6
August 4	„ ..38	....24·7
Sept. 4	„ ..45	....29·3
October 5	„ ..6533·3	} Number..... 165 Rate 32·8
Nov. 4	„ ..56	....36·45
Dec. 4	„ ..44	....28·6

TABLE III.

Birth Rate for past seven years :—

1893.	1894.	1895.	1896.	1897.	1898.	1899.
29·6 ..	31·01 ..	39·3 ..	31·15 ..	28·85 ..	30·01 ..	27·4

TABLE IV.

DEATHS.

Total Number..371.	{	Males....	182	Death Rate..	18·5.
		Females..	189		

Number of Deaths under five years..171. Rate..8·5.

Do. do. one year ..122. Rate..6·1.

This is a Rate of 222 per 1,000 Births.

TABLE V.

Number and Rate of Deaths—Monthly and Quarterly :—

Month.	No.	Rate.	Quarter.
January (5 weeks) ..	29	15·1	Number..... 95 Rate 19·0
February 4 „ ..	36	23·4	
March 4 „ ..	30	19·5	
April 4 „ ..	18	11·7	Number..... 71 Rate 14·2
May 5 „ ..	33	17·1	
June 4 „ ..	20	13·0	
July 5 „ ..	31	16·04	Number..... 102 Rate 20·4
August 4 „ ..	30	19·5	
Sept. 4 „ ..	41	26·69	
October 5 „ ..	34	17·6	Number..... 103 Rate 20·6
Nov. 4 „ ..	31	20·18	
Dec. 4 „ ..	38	24·7	

TABLE VI.

Death Rate for past seven years :—

1893.	1894.	1895.	1896.	1897.	1898.	1899.
21·6 ..	17·7 ..	20·6 ..	20·6 ..	19·5 ..	19·95 ..	18·5

TABLE VII.

Number of Deaths and Death Rate in Districts, Monthly and Quarterly :—

WEST DUKINFIELD.

EAST DUKINFIELD.

Month.	No.	Rate.	Quarter.	No.	Rate.	Quarter.
Jany. (5 wks.)	13	14·3	Number 51 Rate 22·2	16	15·7	Number 44 Rate 16·7
Feby. 4 „	20	27·6		16	19·7	
March 4 „	18	24·8		12	14·7	

April	4	„ 7.. 9·6	} Number 31 Rate 13·3	11....13·5	} Number 40 Rate 14·8
May	5	„	....13..14·3		20....19·7
June	4	„	....11..15·9		9....11·2
July	5	„14..15·4	} Number 46 Rate 19·6	17....16·7	} Number 56 Rate 21·5
Aug.	4	„	....14..19·19		16....19·6
Sept.	4	„	....18..24·58		23....28·33
Oct.	5	„17..18·7	} Number 46 Rate 19·6	17....16·7	} Number 57 Rate 21·9
Nov.	4	„	....14..19·2		17....20·9
Dec.	4	„	....15..20·7		23....28·3

TABLE VIII.

Number of Deaths and Death Rate of Children under five years in Districts, Monthly and Quarterly :—

WEST DUKINFELD.					EAST DUKINFELD.				
Month.		No.	Rate.	Quarter.		No.	Rate.	Quarter.	
Jany.	(5 wks.)....	5..	5·5	} Number 16 Rate 6·9		6....	5·8	} Number 17 Rate 6·8	
Feby.	4 „	6..	8·2			7....	8·6		
Mar.	4 „	5..	7·0			4....	4·9		
April	4 „	1..	1·4	} Number 7 Rate 3·1		3....	3·8	} Number 19 Rate 6·9	
May	5 „	1..	1·1			11....	10·8		
June	4 „	5..	6·8			5....	6·1		
July	5 „	6..	6·6	} Number 24 Rate 10·5		11....	9·9	} Number 35 Rate 13·2	
Aug.	4 „	7..	9·6			9....	11·4		
Sept.	4 „	11..	15·20			15....	18·4		
Oct.	5 „	8..	7·8	} Number 26 Rate 11·1		4....	3·9	} Number 27 Rate 10·5	
Nov.	4 „	7..	9·6			8....	9·8		
Dec.	4 „	11..	15·9			15....	18·3		

TABLE IX.

Death Rate of Children under five for past seven years :—

1893.	1894.	1895.	1896.	1897.	1898.	1899.
10·8 ..	7·9 ..	9·8 ..	8·48 ..	10·1 ..	10·35 ..	8·5

TABLE X.

Number of Deaths and Death Rate of Children under one year in Districts, Monthly and Quarterly :—

WEST DUKINFELD.					EAST DUKINFELD.				
Month.		No.	Rate.	Quarter.		No.	Rate.	Quarter.	
Jany.	(5 wks.)	....	3..	3·3	} Number 9 Rate 3·8	4....	3·9	} Number 13 Rate 4·9
Feby.	4	„	4..		5·5	6....		7·4
Mar.	4	„	2..		2·7	3....		3·6
April	4	„	1..	1·4	} Number 5 Rate 2·2	2....	2·5	} Number 10 Rate 3·8
May	5	„	....	1..	1·1		4....	3·9
June	4	„	....	3..	4·14		4....	4·9
July	5	„	5..	5·5	} Number 22 Rate 9·6	7....	6·9	} Number 27 Rate 10·5
Aug.	4	„	....	7..	9·6		7....	8·6
Sept.	4	„	....	10..	13·8		13....	16·01
Oct.	5	„	6..	6·6	} Number 18 Rate 7·7	4....	3·9	} Number 18 Rate 7·0
Nov.	4	„	....	7..	9·6		5....	6·1
Dec.	4	„	....	5..	6·9		9....	11·08

TABLE XI.

Death Rate of Children under one year for past three years :—

1893.	1894.	1895.	1896.	1897.	1898.	1899.
				6·5	.. 7·1	.. 6·1

TABLE XII.

INFANTILE MORTALITY.

Deaths of Children under 1 year according to months of age :—

Age, Months.	No. of Deaths.
Under 1	27
From 1 to 3	26
„ 3 to 6	29
„ 6 to 9	26
„ 9 to 12	14

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TABLE XIII.

Deaths of Children under one year arranged in streets :—

Astley Street	3	Johnson Brook....	0	Railway Street....	3
Atlas Street.....	0	King Street.....	3	Riverside.....	0
Alma Street.....	1	Kay Street	0	Sykes Street	1
Ashton Street.....	2	Lodge Lane	1	St. John Street	1
Albert Street	1	Longden Terrace..	1	St. Mark Street....	2
Birch Lane	3	Lamb Street	1	Shaw Street	2
Bass Street	3	Leech Street	1	Smith Street	1
Bridge Street	1	Meadow Lane	1	Sandy Lane	0
Brunswick Street ..	1	Marland Street....	2	Spencer Street	0
Bates Street.....	1	Mary Street	1	Town Lane.....	4
Chapel Hill	1	Nelson Street	1	Taylor Street.....	3
Clarendon Street ..	1	Nineteen Row	1	Vicarage Street....	1
Crescent Road	2	Ogden Street	1	Victoria Street	1
Cheetham Hill Rd..	3	Old Road.....	1	Victoria Road	1
Church Street.....	4	Oxford Road	3	Wharf Street.....	4
Cemetery Road	1	Park Street.....	5	Water Street.....	0
Charles Street	2	Pearson Street	1	Wilde Street	0
Combermere Street	0	Park Road	6	Yew Tree Lane....	0
Cooper Street.....	0	Peel Street	2		
Dewsnap Lane	0	Pitt Street	1	COURTS AND YARDS.	
Foundry Street	3	Plough Street	1		
Francis Street	1	Parliament Street..	2	Buckley's Yard....	2
Furnace Street	0	Pickford Lane	2	Pickford Court	1
Globe Lane.....	0	Platt Street.....	1	Raine's Place.....	1
Hope Street	1	Pownall Street	1	Jewitt's Court	1
Highfield Street....	1	Palmer Street	0	Stanley Court	1
George Street.....	2	Princess Street....	0	Walter's Yard	1
Hill Street	0	Queen Street	4	Warburton's Court.	5
Jeffrey Street.....	2	Robert Street.....	1	Wrigley's Court....	1

TABLE XIV.

Number of Deaths from, and Rate of seven principal Zymotic Diseases in Quarters :—

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year.
No.	7	1	23	19	50
Rate	1·2	0·2	4·6	3·8	2·5

TABLE XV.

Number and Rate from seven principal Zymotic Diseases per Quarter, in Districts :—

WEST DUKINFIELD.

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year.
No.	4	0	10	4	18
Rate	1·68	0	4·2	1·68	1·89

EAST DUKINFIELD.

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year.
No.	3	1	13	15	32
Rate	1·1	0·38	4·9	5·5	3·04

TABLE XVI.

Rate from seven principal Zymotic Diseases separately in Quarters :—

Disease.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year.
Smallpox.....	0	.. 0	.. 0	.. 0	.. 0
Measles	0·4	.. 0	.. 0·4	.. 2·2	.. 0·75
Scarlet Fever	0	.. 0	.. 0·8	.. 0·4	.. 0·3
Diphtheria & Croup..	0·6	.. 0·2	.. 0·4	.. 0	.. 0·3
Whooping Cough	0·2	.. 0	.. 0	.. 0	.. 0·05
Fevers	0·2	.. 0	.. 0·4	.. 0·8	.. 0·35
Diarrhœa.....	0	.. 0	.. 2·6	.. 0·4	.. 0·75
Total.....	1·4	0·2	4·6	3·8	2·5

TABLE XVII.

Rates from Seven principal Zymotic Diseases separately as they occurred in districts quarterly :—

WEST DUKINFIELD.

Disease.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year.
Smallpox	0	.. 0	.. 0	.. 0	.. 0
Measles	0·84	.. 0	.. 0	.. 1·26	.. 0·52
Scarlet Fever.....	0	.. 0	.. 1·26	.. 0	.. 0·31
Diphtheria and Croup ..	0·42	.. 0	.. 0·42	.. 0	.. 0·21
Whooping Cough	0	.. 0	.. 0	.. 0	.. 0
Fevers	0·42	.. 0	.. 0·42	.. 0·42	.. 0·31
Diarrhœa	0	.. 0	.. 2·1	.. 0	.. 0·52
Total.....	1·68	0	4·2	1·68	1·87

EAST DUKINFIELD.

Disease.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year.
Smallpox	0	.. 0	.. 0	.. 0	.. 0
Measles	0	.. 0	.. 0·76	.. 3·04	.. 0·95
Scarlet Fever	0	.. 0	.. 0·38	.. 0·76	.. 0·285
Diphtheria & Croup	0·76	.. 0·30	.. 0·38	.. 0	.. 0·38
Whooping Cough	0·38	.. 0	.. 0	.. 0	.. 0·095
Fevers	0	.. 0	.. 0·38	.. 1·14	.. 0·38
Diarrhœa	0	.. 0	.. 3·04	.. 0·76	.. 0·95
Total	1·14	0·38	4·94	5·7	3·04

TABLE XVIII.

Showing Deaths from Zymotic Diseases as they occurred Monthly :—

	Smallpox.	Measles.	Scarlet Fever.	Diphtheria & Croup.	Whooping Cough.	Fevers.	Diarrhœa.	
Jan.	0	.. 1	.. 0	.. 1	.. 1	.. 0	.. 0	} 7
Feb.	0	.. 1	.. 0	.. 0	.. 0	.. 0	.. 0	
Mar.	0	.. 0	.. 0	.. 2	.. 0	.. 1	.. 0	
April	0	.. 0	.. 0	.. 0	.. 0	.. 0	.. 0	} 1
May	0	.. 0	.. 0	.. 1	.. 0	.. 0	.. 0	
June	0	.. 0	.. 0	.. 0	.. 0	.. 0	.. 0	
July	0	.. 0	.. 3	.. 1	.. 0	.. 0	.. 2	} 23
Aug.	0	.. 0	.. 1	.. 1	.. 0	.. 2	.. 3	
Sept.	0	.. 2	.. 0	.. 0	.. 0	.. 0	.. 8	
Oct.	0	.. 1	.. 1	.. 0	.. 0	.. 3	.. 1	} 19
Nov.	0	.. 3	.. 1	.. 0	.. 0	.. 0	.. 0	
Dec.	0	.. 7	.. 0	.. 0	.. 0	.. 1	.. 1	
Total....	0	15	6	6	1	7	15	50

TABLE XIX.

Showing the same in West Dukinfield :—

Scarlet Diphtheria Whooping														
Smallpox. Measles. Fever. & Croup. Cough. Fevers. Diarrhœa.														
Jan.	0	..	1	..	0	..	0	..	0	..	0	..	0	} 4
Feb.	0	..	1	..	0	..	0	..	0	..	0	..	0	
Mar.	0	..	0	..	0	..	1	..	0	..	1	..	0	
Apr.	0	..	0	..	0	..	0	..	0	..	0	..	0	} 0
May	0	..	0	..	0	..	0	..	0	..	0	..	0	
June	0	..	0	..	0	..	0	..	0	..	0	..	0	
July	0	..	0	..	3	..	0	..	0	..	0	..	1	} 10
Aug.	0	..	0	..	0	..	1	..	0	..	1	..	1	
Sep.	0	..	0	..	0	..	0	..	0	..	0	..	3	
Oct.	0	..	0	..	0	..	0	..	0	..	1	..	0	} 4
Nov.	0	..	0	..	0	..	0	..	0	..	0	..	0	
Dec.	0	..	3	..	0	..	0	..	0	..	0	..	0	
Total..	0		5		3		2		0		3		5	18

TABLE XX.

Showing the same in East Dukinfield :—

	Smallpox.		Measles.		Scarlet Fever.		Diphtheria & Croup.		Whooping Cough.		Fevers.		Diarrhœa.	
Jan.	0	..	0	..	0	..	1	..	1	..	0	..	0	} 3
Feb.	0	..	0	..	0	..	0	..	0	..	0	..	0	
Mar.	0	..	0	..	0	..	1	..	0	..	0	..	0	
Apr.	0	..	0	..	0	..	0	..	0	..	0	..	0	} 1
May	0	..	0	..	0	..	1	..	0	..	0	..	0	
June	0	..	0	..	0	..	0	..	0	..	0	..	0	
July	0	..	0	..	0	..	1	..	0	..	0	..	1	} 13
Aug.	0	..	0	..	1	..	0	..	0	..	1	..	2	
Sep.	0	..	2	..	0	..	0	..	0	..	0	..	5	
Oct.	0	..	1	..	1	..	0	..	0	..	2	..	1	} 15
Nov.	0	..	3	..	1	..	0	..	0	..	0	..	0	
Dec.	0	..	4	..	0	..	0	..	0	..	1	..	1	
Total..	0		10		3		4		1		4		10	32

TABLE XXI.

Return of Deaths, Death Rates, &c., from the Seven principal Zymotic Diseases for the past seven years :—

	1893	1894	1895	1896	1897	1898	1899
Smallpox.....	0 .. 0 .. 0 .. 0 .. 0 .. 0 .. 5						
Measles	9 .. 1 .. 7 .. 1 .. 36 .. 4 .. 10						
Scarlet Fever	4 .. 7 .. 9 .. 10 .. 7 .. 9 .. 6						
Diphtheria & Croup	2 .. 0 .. 4 .. 3 .. 1 .. 3 .. 6						
Whooping Cough..	2 .. 0 .. 4 .. 13 .. 19 .. 4 .. 1						
Fevers	1 .. 10 .. 4 .. 8 .. 3 .. 10 .. 7						
Diarrhoea	37 .. 4 .. 18 .. 11 .. 40 .. 60 .. 15						
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	56	26	49	46	106	90	50
Deaths from other causes	326 .. 289 .. 337 .. 309 .. 284 .. 309 .. 321						
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	384	315	386	355	390	399	371
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Death Rate from seven principal Zymotic diseases	3.2 .. 1.45 .. 2.62 .. 2.4 .. 5.3 .. 4.5 .. 2.5						
Death Rate from other causes ..	18.4 .. 16.25 .. 18.55 .. 16.28 .. 14.2 .. 15.45 .. 16.0						
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total Death Rate..	21.6	17.7	21.17	18.68	19.5	19.95	18.5

TABLE XXII.
DEATHS CLASSIFIED.

All causes 371

CLASSES.

I—Zymotic Diseases	73
II—Constitutional Diseases.....	36
III—Local Diseases	202
IV—Developmental Diseases	43
V—Violent Deaths	13
VI—Causes not specified or undefined	4

ORDERS.

I—1 Miasmatic Diseases	63
2 Enthetic Diseases	1
3 Dietic Diseases	8
4 Parasitic Diseases	1
II—1 Diathetic Diseases	6
2 Tubercular Diseases	30
II—1 Diseases of Nervous System	42
2 Diseases of Circulatory System	27
3 Diseases of Respiratory System	64

4 Diseases of Digestive System	53
5 Diseases of Urinary System	12
6 Diseases of Organs of Generation	0
7 Diseases of Organs of Locomotion	2
8 Diseases of Integumentary System	2
IV—1 Developmental Diseases of Children	13
2 Developmental Diseases of Adults.....	3
3 Developmental Diseases of Old People	14
4 Diseases of Nutrition	13
V—1 Accident or Negligence.....	6
2 Homicide	0
3 Suicide	7
VI—1 Causes not specified, &c.	4

CLASS I.

Order 1.—Influenza	9
Measles.....	15
Scarlet Fever	6
Diphtheria	4
Whooping Cough.....	1
Croup	2
Typhoid Fever.....	7
Diarrhœa	15
Rheumatism	4
Order 2.—Syphilis	1
Order 3.—Inanition of Infancy	7
Rickets	1
Order 4.—Thrush.....	1

CLASS II.

Order 1.—Cancer	5
Mortification	1
Order 2.—Tabes Mesenterica	2
Phthisis	23
Hydrocephalus.....	2
Tubercular Meningitis	3

CLASS III.

Order 1.—Meningitis	6
Apoplexy	22
Paralysis	3
Convulsions.....	10
Brain Diseases not distinguished.....	1

Order 2.—Aneurism.....	2
Heart Disease	25
Order 3.—Laryngitis	1
Laryngismus Stridulus	1
Bronchitis.....	35
Pleurisy	1
Pneumonia	25
Asthma.....	1
Order 4.—Gastritis	2
Enteritis	49
Liver Disease	1
Hernia	1
Order 5.—Nephritis	10
Bright's Disease	2
Order 7.—Joint Disease	2
Skin Disease	2
CLASS IV.	
Order 1.—Premature Birth.....	10
Cyanosis	1
Teething	2
Order 2.—Child Birth	3
Order 3.—Old Age	14
Order 4.—Atrophy and Debility.....	13
CLASS V.	
Order 1.—Crushes, &c.....	4
Burns	1
Other Violent Deaths.....	1
Order 3.—Drowning.....	5
Hanging	2
CLASS VI.	
Causes not Specified or Undefined	4
Total.....	<u>371</u>

The tables required to be filled by the Local Government Board, as well as the Inspector's Report, will be found appended to this Report.

Thanking you for your courtesy and consideration at all times,

I am, Gentlemen,

Your obedient Servant,

J. R. S. PARK, M.O.H.

TABLE OF DEATHS.

During the year 1899, in the Dukinfield Urban Sanitary District, classified according to Diseases, Ages, and Localities.

Mortality from all causes, at subjoined ages :—

	West.	East.
Under 1 year	54	68
1 and under 5	19	20
5 and under 15	9	10
15 and under 25	9	9
25 and under 65	53	58
65 and upwards	30	32
	<hr/> 174	<hr/> 197

Mortality from subjoined causes, distinguishing deaths of children under five years of age :—

	West.	East.
Smallpox	0	0
Scarlatina	1	2
Diphtheria	1	1
Membranous Croup	0	2
Fever—Typhus	0	0
„ Enteric or Typhoid	0	0
„ Puerperal	0	0
Cholera	0	0
Erysipelas	0	0
Measles	5	9
Whooping Cough	0	1
Diarrhoea and Dysentery	5	10
Rheumatic Fever	0	0
Phthisis	0	1
Bronchitis, Pneumonia and Pleurisy	13	21
Heart Disease	0	0
Influenza	2	0
Injuries	1	1
All other Diseases	45	40
	<hr/> 73	<hr/> 88

Mortality from subjoined causes, distinguishing deaths of persons of 5 years of age and upwards :—

	West.	East.
Smallpox	0	0
Scarlatina.....	2	1
Diphtheria.....	1	1
Membranous Croup.....	0	0
Fever —Typhus.....	0	0
„ Enteric or Typhoid.....	3	4
„ Puerperal	0	0
Cholera	0	0
Erysipelas	0	0
Measles	0	1
Whooping Cough.....	0	0
Diarrhoea and Dysentery.....	0	0
Rheumatic Fever	1	3
Phthisis.....	14	8
Bronchitis, Pneumonia and Pleurisy.....	10	19
Heart Disease	13	12
Influenza	6	1
Injuries	3	0
All other Diseases.....	48	59
	<hr/>	<hr/>
	101	109
	<hr/>	<hr/>

TABLE OF POPULATION, BIRTHS,
AND OF
NEW CASES OF INFECTIOUS SICKNESS,

Coming to the knowledge of the Medical Officer of Health, during the year 1899, in the Dukinfield Urban Sanitary District, classified according to Diseases, Ages, and Localities :—

Census, 1891	17,408
Estimated to middle of 1899 :—	
West Dukinfield.....	9,500
East Dukinfield	10,500
	<hr/>
Total.....	20,000
	<hr/>
Registered Births... .. .	551

UNDER FIVE YEARS.

	West.	East.
Scarlatina	8	15
Diphtheria.....	0	2
Membranous Croup	2	0
Enteric or Typhoid	2	6

FIVE YEARS AND UPWARDS.

	West.	East.
Scarlatina	27	41
Diphtheria.....	5	4
Enteric or Typhoid	11	30
Puerperal	0	1
Erysipelas	3	4

Number of such cases removed from their homes in the several localities for treatment in Isolation Hospital :—

	West.	East.
Scarlatina ..	1	2
Enteric or Typhoid	1	2

INSPECTOR'S REPORT.

MONTH.	No. of Automatic Flush Closets.	No. of Closets Stop-ped up.	No. of Dilapidated and Wet Ashpits.	No. of Defective Drains.	No. of Visits to Canal.	No. of Boats Inspected.	No. of Prosecutions for Low Chimneys.	No. of Prosecutions for Firing Chimneys.	No. of Slaughter Houses Inspected.	No. of Cow-sheds and Dairies Inspected.	No of Miscellaneous Nuisances.	No. of Loads of Nightsoil Removed.	No. of Barrels of Excreta Removed.	No. of Loads of Dry Ashes Removed.	No. of Loads of Sweepings Removed.	No. of Loads of Snow Removed.	No. of Barrels of Water used on the Streets.	TOTAL.
January	338	8	1	9	7	5	..	..	..	12	3	416	56	97	95	..	..	1047
February .....	..	..	3	9	7	4	..	..	6	8	..	504	56	92	97	..	..	786
March .....	..	..	..	11	3	1	2	..	..	13	..	703	70	120	136	..	..	1059
April .....	..	..	2	10	5	2	..	..	..	10	2	418	56	96	111	..	24	736
May.....	..	..	15	9	4	1	..	..	..	4	3	510	56	96	115	..	112	925
June	376	15	5	5	6	6	..	..	8	9	1	611	70	122	110	..	489	1833
July.....	444	15	1	..	4	2	..	..	..	6	..	471	56	100	106	..	209	1414
August	461	27	1	7	5	1	..	..	10	8	..	463	56	127	138	..	113	1417
September	461	9	26	3	4	1	..	..	..	14	..	335	70	107	112	..	1	1143
October	486	10	15	23	6	13	..	..	10	9	..	354	56	129	117	..	6	1234
November	486	2	9	9	..	..	..	..	..	7	2	471	56	131	91	..	..	1264
December	486	6	2	12	3	3	..	126	..	3	..	468	70	107	149	283	..	1718
Total	3538	92	80	107	54	39	2	126	34	103	11	5724	728	1324	1377	283	954	14576

J. SUMMERFIELD,

SANITARY INSPECTOR.

